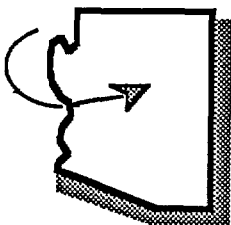
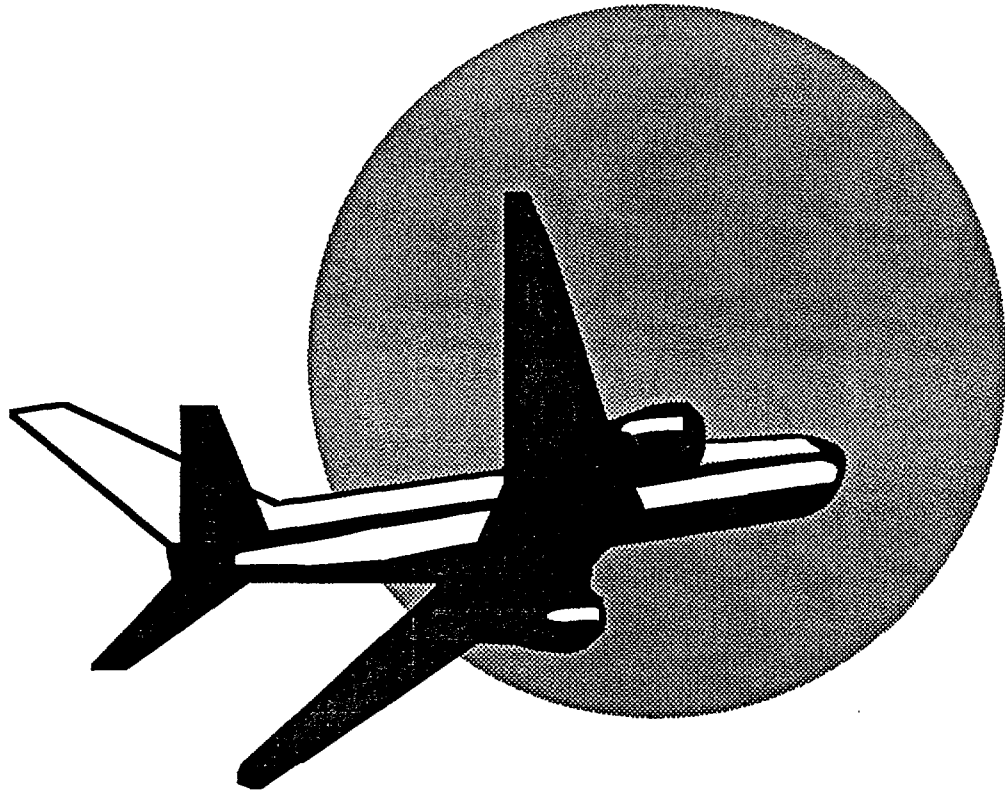


84-85

*AERONAUTICS DIVISION
PROGRESS REPORT*



ARIZONA DEPARTMENT OF TRANSPORTATION

1984-85

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HISTORY

The history of the Arizona Department of Transportation, Aeronautics Division, began with the creation of the Arizona Aviation Authority in March of 1950. The Authority originally consisted of an unpaid board of five members serving three-year terms. The primary purpose of the board was to advise the Governor and the legislature on aviation matters.

In May of 1955, a part-time director was appointed. Later that same year, the position became full-time. The Authority started monthly publication of a newsletter in 1956 and an airmarking program to aid in cross-country navigation in 1958. By 1959, the Authority had begun assisting communities in developing airfields. In 1962, the legislature created the Arizona Department of Aeronautics and appropriated funds to assist in construction of a Grand Canyon National Park Airport. Construction design began in 1963 and the airport officially opened two years later.

The old Department of Aeronautics was controlled by a seven-member Aeronautics Board. The Board members were appointed to five-year terms by the Governor and the Senate. The primary function of the Board was to budget funds for airport development.

In 1974, the Departments of Aeronautics, Highways and Motor Vehicles were combined to form the present-day Arizona Department of Transportation.

Directors

1955 - 1975	James Vercillino
1975 - 1975	John Burns
1975 - 1978	John Walters
1978 -	Ascencion (Sonny) Najera

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AUTHORITY AND RESPONSIBILITY

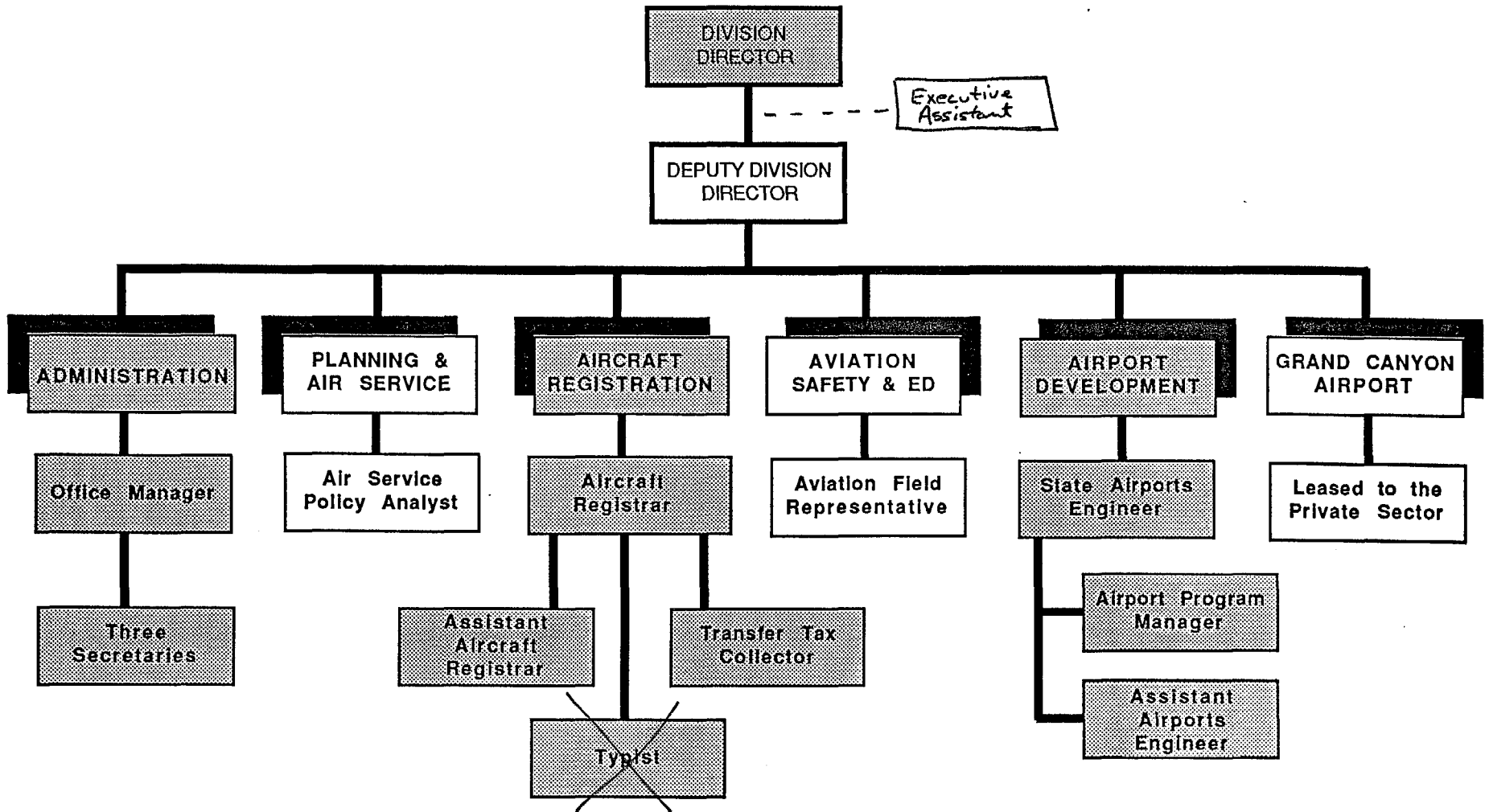
The Arizona Department of Transportation is composed of five divisions; Aeronautics, Highways, Transportation Planning, Motor Vehicles and Administrative Services. The Aeronautics Division is charged by state law to: encourage and advance the safe and orderly development of aviation in the State; assemble and distribute to the public information relating to aviation; represent the State on issues of routing and rate schedules concerning commercial airline traffic; accept federal and other monies for airport development or air navigation facilities; ensure that the Grand Canyon National Park Airport is operated and maintained; certificate aircraft dealers; register non-airline aircraft within the State and make recommendations on legislative and policy issues. For statutory references, see Arizona Revised Statutes, Title 28, Chapter 12.

The Aeronautics Division is organized along functional lines of responsibilities. As the organizational chart on the next page indicates, the Division is composed of the Aircraft Registration, Airports Development, Grand Canyon National Park Airport, Air Service, Aviation Safety and Education, and Administration Sections.

ARIZONA DEPARTMENT OF TRANSPORTATION AERONAUTICS DIVISION

ORGANIZATIONAL CHART

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ARIZONA AIRPORT SYSTEM DESCRIPTION

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Airports are considered facilities which enable residents of a community to have access to the national system of airspace and airports. From a state standpoint, it is considered desirable to provide the general public with no more than a 30-minute driving time to a public use airport facility. In Arizona, there are 181 airports registered with the Federal Aviation Administration (FAA). A primary system of 58 key airports provides service to about 87 percent of the population with registered aircraft in 1984. Of the 58 system airports, 46 are publicly owned, while 7 are Indian-controlled and 5 are private.

Primary airports are those airports which have:

- * 10 or more based aircraft and/or 2,000 or more annual operations;
- * Scheduled air service by either an air carrier or commuter airline on a regular basis; or
- * Projections to meet the above criteria within 10 years.

There are also 70 heliports or helistops currently listed by the FAA in Arizona. At present, all are private-restricted facilities.

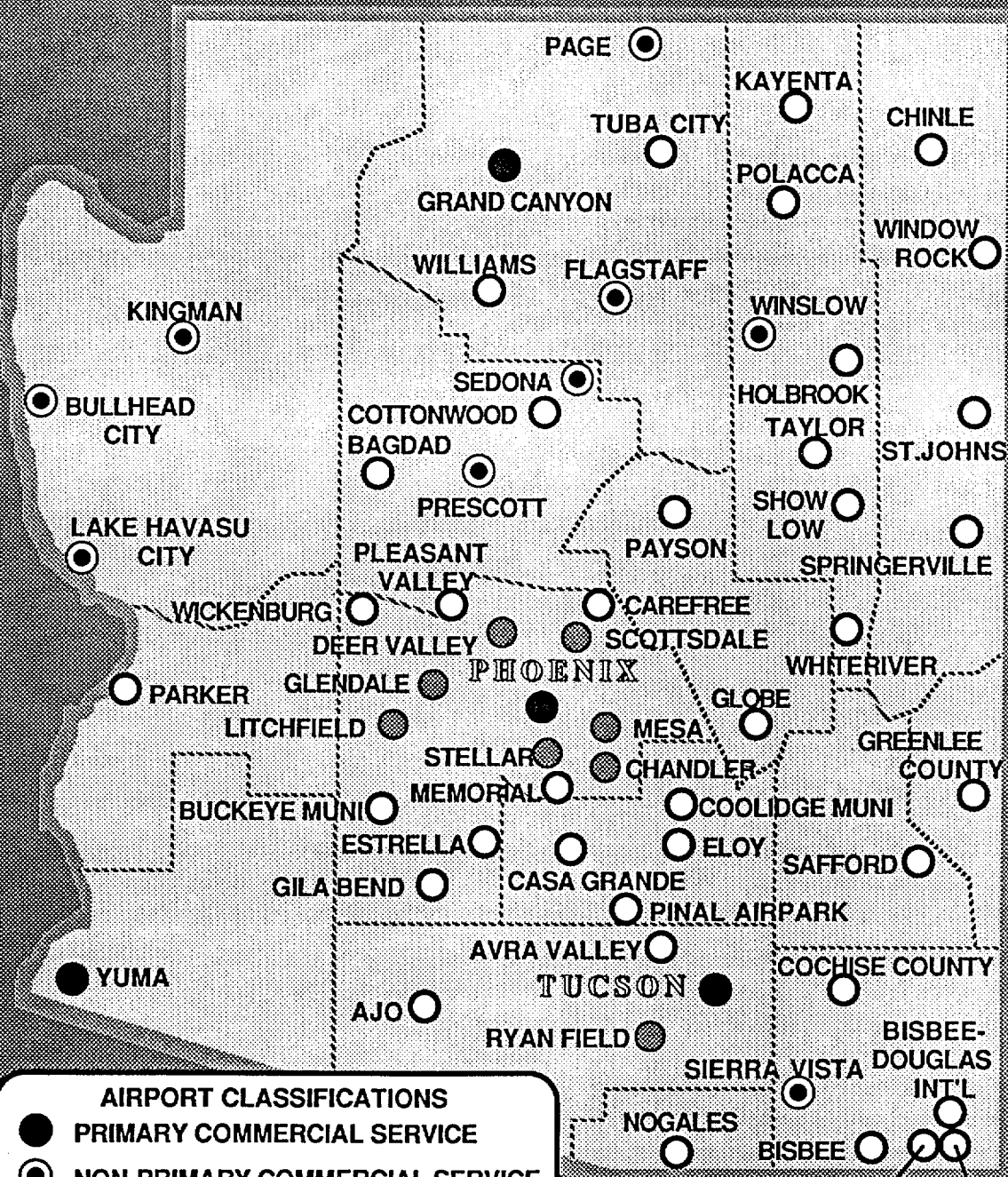
Capital improvements for active airport facilities are often financed by a combination of generally available sources: federal funds, state funds and local funds. The federal funds are generated by aviation users and administered back to airports by the Federal Aviation Administration. For Federal funding purposes, airports are categorized and defined as noted below:

ARIZONA SYSTEM AIRPORTS BY TYPE

Primary Commercial Service (Including Sky Harbor & Tuscon Int'l); An airport served by scheduled airlines and enplaning .01 percent of the nation's total passengers.	4
Non-Primary Commercial Service Airports Airports with regularly scheduled service and enplaning 2500 or more passengers.	9
Reliever Airports Relieves congestion at a commercial service airport and provides more general aviation access to the overall community.	6
General Aviation Airports Any airport used for general purposes.	<u>39</u>
TOTAL SYSTEM AIRPORTS	58

ARIZONA DEPARTMENT OF TRANSPORTATION

PRIMARY AIRPORT SYSTEM



- AIRPORT CLASSIFICATIONS**
- PRIMARY COMMERCIAL SERVICE
 - ◉ NON-PRIMARY COMMERCIAL SERVICE
 - ◐ RELIEVER
 - GENERAL AVIATION
- 1985

COCHISE COLLEGE DOUGLAS MUNI

AIRPORT DEVELOPMENT

The Airport Development Section is responsible for the administration of the statewide 5-year Airport Development Program. The administration of this program involves:

- 1) Systematic planning coordination to ensure logical and equitable growth for all public-owned and public-use airport facilities within the state.
- 2) Funding aid and assistance to airport sponsors.
- 3) Technical support for airports and airport projects.
- 4) Grand Canyon Airport construction projects.

PLANNING

The planning process for the 5-year Airport Development Program focuses on an extensive evaluation of needs directed toward developing an improvements program consistent with the goals established in the recently published State Arizona Aviation Needs Study. Needs are then related to anticipated funds to arrive at a financially balanced program that makes the best use of available aviation dollars.

FUNDING

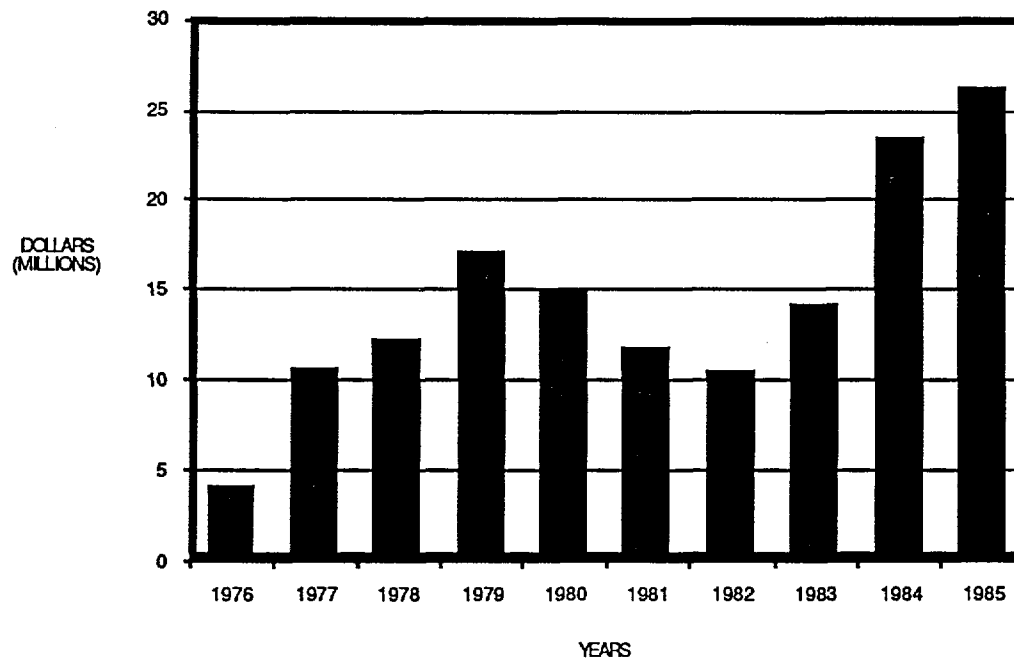
Airport construction and development in Arizona is accomplished through a cooperative effort involving three levels of government - federal, state and local. Each of these governmental units has shared in the financing of airport development projects in the state.

The Federal Airport Improvement Program, when viewed in dollars allocated per year, has increased more than 500% from 1976 to 1985 and has doubled from 1982 to 1985. This is an indicator of the growth of aviation in Arizona and the success of the Aeronautics Division in obtaining discretionary funding from Federal Aviation Administration (FAA). Figure No. 1 depicts this graphically.

At the local level, funds for airport development may come from several sources. General fund contributions, revenue from general obligation bonds, user taxes and revenues from airport leases and concessions are some of the primary sources of funding. However, in terms of airport needs, the local communities will be unable to keep pace without increased federal or state assistance. Under the current program, the local sponsor provides a matching share of just under five per cent on federal participating projects and ten per cent on state/local projects.

Figure No. 1

FAA GRANT FUNDS EXPENDED IN ARIZONA



The number of airport projects has increased substantially. Between FY 1976 and FY 1980, a total of 68 airport projects were completed. During the next five-year period from FY 1981 to FY 1985, the total number of completed projects rose to 148. This represents an increase of 117% when comparing the two five-year periods. Figure No. 2 illustrates this increase. Twenty-nine projects were completed in FY 1985 and forecasts for FY 1986 indicate that 40 projects will be completed.

Additionally, State expenditure amounts for projects that were completed have increased as Figure No. 3 indicates. Between FY 1976 and FY 1980, a total of \$1.933 Million of state funds were expended on completed airport projects. During the next five-year period from FY 1981 to FY 1985, the total amount of State expenditures for completed projects rose to \$12.089 Million. The amount of expenditures for closed projects for FY 1986 is estimated to be \$4.5 Million. The dramatic increase in the amount of State grant expenditures during the past five years reflects the high demand for airport improvements at the present time and further supports the projected high demands in the next 10 years.

If present revenue sources remain the same, only a small growth in state aviation revenues can be anticipated over the next 10 years. Unless new sources are found, the projected economic outlook for the state airport system is not good. The Governor's Aviation Futures Task Force Report concludes that a shortfall in revenues of \$422 million exists for the State airport system, during the next ten years.

PROJECT ADMINISTRATION

All airport construction projects funded through the Five-Year Airport Development Program are subjected to technical review and monitoring from design through construction. During the design phase, the Airport Development Section assists sponsors in locating and interpreting design criteria. Additional assistance is granted by reviewing and commenting on engineering agreements, plans, specifications and contract documents for compliance with State grant requirements.

As the project progresses through the construction phase, the Airport Development section reviews bid tabulations, performs field reviews of work during construction, reviews field and laboratory procedures and test results and analyzes and approves change orders. At the conclusion of the project, a final inspection is performed. As-built plans and certified quantities are required before final payment is made. Projects are audited to ensure compliance with grant and contractual requirements.

TECHNICAL ASSISTANCE

The objective is to improve construction quality, decrease construction costs, and simplify administrative procedures through all stages of the project.

Figure No. 2

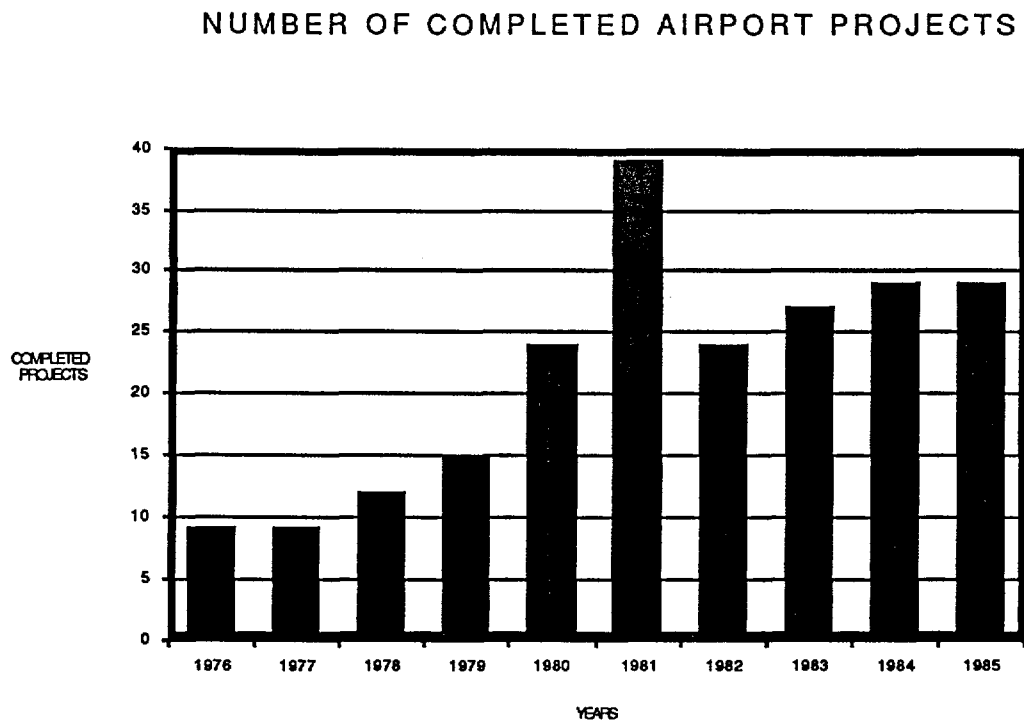
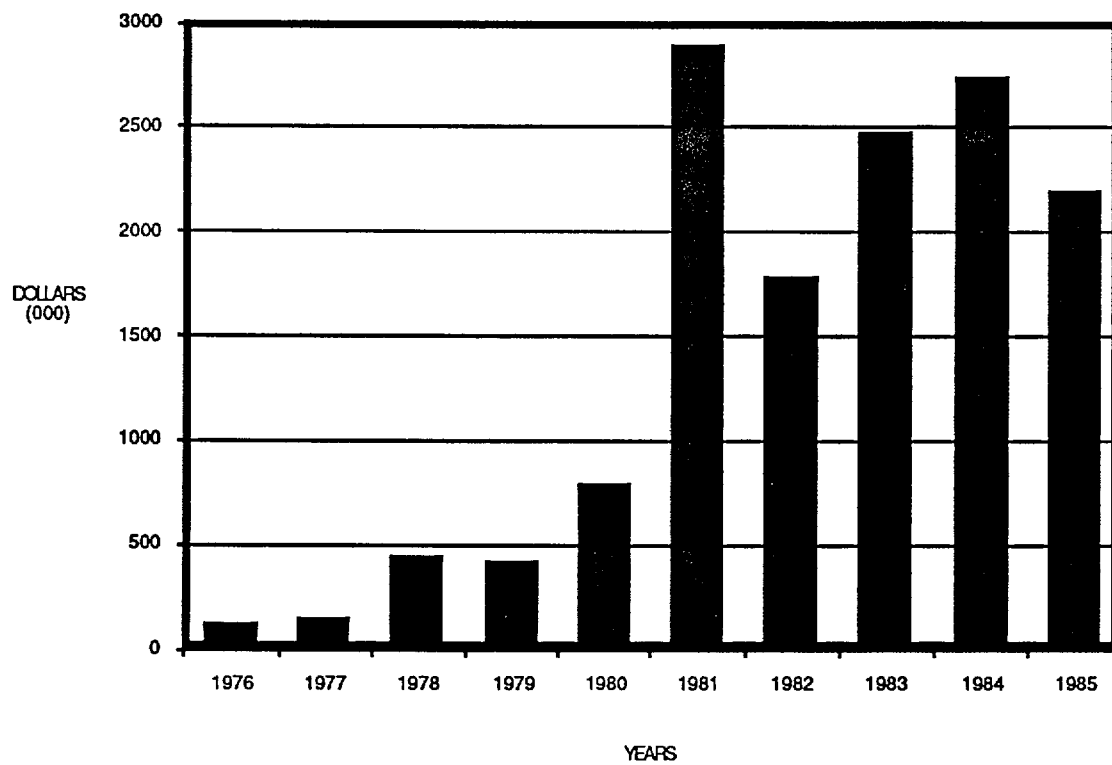


Figure No. 3

STATE GRANT FUNDS EXPENDED



Construction quality has been upgraded by more thorough review of plans and specifications, by improved requirements for field and laboratory testing of materials and by the initiation of a record sampling program with the cooperation of the Highways Division.

The Airport Development Section also provides technical support for special aeronautical studies and the development of conceptual airport plans. Local airport sponsors may, at any time, receive technical comment and guidance in the development of their airports.

Construction costs are being decreased by encouraging the use of locally available mineral materials rather than using nationally developed FAA specification materials which may require special crushing or extensive transportation. Construction of experimental pavements using less expensive binders such as sulfur is also being encouraged. The sponsor's administrative burden has been reduced by providing assistance through the Airport Development Section in fulfilling both State and Federal requirements. Where possible, forms already required by the Federal Government are used for State needs, reducing duplication of effort.

GRAND CANYON AIRPORT CONSTRUCTION ENGINEERING

The Airport Development Section is also in charge of engineering and administering construction projects at the State-owned Grand Canyon Airport. All funding, pavement and project authorizations are processed by the Airport Development Section.

All engineering phases of construction work undertaken at the Grand Canyon Airport, are either performed directly by this office, as in design and contract administration, or coordinated with personnel directly on site, as in progress inspections, utilizing assistance from the Highways Division.

Table 1**AIRPORT PROJECTS COMPLETED IN FISCAL YEAR 1984-85**

<u>DATE</u>	<u>AIRPORT</u>	<u>FUND#</u>	<u>STATE\$</u>	<u>LOCAL\$</u>	<u>FEDERAL\$</u>	<u>TOTAL\$</u>
8/84	St. Johns Surface Runway 13/31	90651	180,000	61,478	0	241,478
8/84	Springerville G/D/S Runway 3/21 Ext. & Parallel Taxiway	90739	168,299	27,514	202,014	397,827
9/84	Payson Surf. Parallel Taxiway; G/D/S Parking Apron	90757	16,377	16,377	333,634	366,388
9/84	Show Low Surface Parking Apron	90755	13,132	16,310	299,889	329,331
11/84	St. Johns Surface Runway 13/31	90783	16,499	16,499	336,109	369,107
11/84	Scottsdale Security Fence; G/D/S Parking Apron	90656	93,803	10,422	0	104,225
11/84	Scottsdale Drain Runway 3/21; Surf. Apron & Apron Access Taxiway	90723	268,573	29,841	0	298,414
12/84	Taylor G/D/S Parking Apron	90787	10,147	10,147	206,716	227,010
12/84	Winslow Crack Seal Runway 11/29; Rehab. Taxiway 11/29	90795	18,997	20,688	404,227	443,912
12/84	Tucson-Ryan Fire Protection System	90725	54,000	6,606	0	60,606
1/85	PHX-Litchfield Utilities	90717	180,000	40,684	0	220,684
1/85	Eloy Obstruction Removal	90729	35,578	3,953	0	39,531
1/85	Flagstaff-Pulliam Surface Main Runway 3/21	90703	38,396	4,266	0	42,662
3/85	Gila Bend G/D/S Taxiway & Parking Apron	90775	14,087	14,087	286,989	315,163
3/85	Cochise College G/D/S Parallel Taxiway	90616	153,720	19,511	0	173,231

Table 1 - Continued

AIRPORT PROJECTS COMPLETED IN FISCAL YEAR 1984-85 -- Continued

<u>DATE</u>	<u>AIRPORT</u>	<u>FUND#</u>	<u>STATES\$</u>	<u>LOCAL\$</u>	<u>FEDERALS\$</u>	<u>TOTAL\$</u>
5/85	Show Low Surface Main Runway 3/21	90823	112,790	12,532	0	125,322
5/85	Casa Grande Surface Main Runway 5/23	90604	313,678	34,853	0	348,531
5/85	Grand Canyon Airport Master Plan	90594	6,939	0	70,687	77,626
5/85	Wickenburg G/D/S Parking Apron; Segm. Circle; Security Lights	90789	14,700	14,714	299,639	329,053
6/85	Yuma Construct Perimeter Service Road	90797	4,609	4,609	93,899	103,117
6/85	Eloy G/D/S Parking Apron	90771	4,879	4,879	99,409	109,167
6/85	Yuma G/D/S Taxiway 17/35	90759	10,794	10,794	219,906	241,494
6/85	Nogales MIRL; Surface Taxiway & Apron	90733	22,709	22,709	462,628	508,046
6/85	Williams EIA; G/D/S Runway 18/36	90669	30,110	30,110	613,383	673,603
6/85	Glendale Obstruction Removal	90707	270,000	30,000	0	300,000
6/85	Sedona MIRL; VASI; Taxiway Delin; Wind Cone; Segm. Circle	90793	6,528	6,528	132,989	146,045
6/85	Coolidge Surface Taxiway; VASI; Delineators	90769	15,363	15,363	312,964	343,690
6/85	Flagstaff Drain & Surface Taxiways	90705	21,599	21,599	440,000	483,198
6/85	Sierra Vista Water System; Reconstruct Taxiway & Parking Apron	90553	99,000	164,635	0	263,635
TOTAL			<u>\$2,195,306</u>	<u>\$ 671,708</u>	<u>\$4,815,082</u>	<u>\$7,682,096</u>

AIRCRAFT REGISTRATION

The aircraft registration section is responsible for collection of an aircraft registration fee and a lieu tax which is mandated by law to be "one percent of the average fair market value" of the aircraft. The division uses the Price Digest for its source on most aircraft. The fees and taxes must be paid annually by the last day of February or within sixty days after entry into the state. Dealer aircraft are exempt from the lieu tax if the aircraft is not used commercially and held for resale only. An aircraft in storage is also exempt if a proper and timely affidavit is filed. A non-resident may base his aircraft in the state ninety days in a calendar year without registering. The revenues collected are deposited in the state aviation fund and can only be used for construction, development and improvement of publicly owned airports throughout the state.

Aircraft registration has experienced a rapid rate of growth since 1976. The number of registered aircraft has increased by 46% while collections have risen 430% during the same period. Revenue projections for 1985-86 indicate over \$2,800,000 will be collected.

The registration section works very closely with law enforcement agencies. The division's registration records are useful in determining true ownership as well as historical background of an aircraft. The registration section has developed a reputation nationwide for having the most current ownership information available. Some of the agencies which use the information include the Federal Bureau of Investigation (FBI), Drug Enforcement Administration (DEA), Department of Public Safety (DPS), Internal Revenue Service (IRS), National Narcotics Border Interdiction System (NNBIS), sheriff's offices and local city police departments. The on-line automated records system has proven very beneficial to all law enforcement agencies. Through the Arizona Department of Public Safety computers, all law enforcement agencies now have access to aircraft registration records twenty-four hours a day.

The aircraft registration section has been successful in getting banks and lending agencies to rewrite their manuals on aircraft loans to include a check with the division to see if an aircraft is properly registered and current with the taxes. It has saved problems in many instances for the lending agency as well as the prospective buyer.

All correspondence and forms are now being processed with the section's microcomputers. Aircraft are tracked on transient ramps using daily airport reports which are placed in the computer. From this information, aircraft owners are notified when their registration status changes. All aircraft to be registered are closely monitored through this process.

Registration information is available to consultants, engineering firms and various planning groups for planning for airports as well as forecasting for future development. Also aircraft registration information is provided to the airports to assist in identifying aircraft and/or owners when necessary.

The registration section is responsible for certificating aircraft dealers in the state. A surety bond must be posted in the amount of \$10,000. Surety bonds are kept on file in the division and an aircraft purchaser can file against the bond if a deal is misrepresented.

The registration section is responsible for the collection of a transfer tax on the sale of an aircraft between individuals. This tax is 4% of the selling price on the casual sale of an aircraft. The money collected is sent to the Department of Corrections to be used for the construction of a new prisons. No transfer taxes are used for the aviation purposes.

FISCAL YEAR 1984-85

NUMBER OF AIRCRAFT REGISTERED-----	6,158
BALLOONS-----	151
GLIDERS-----	106
ANTIQUES-----	118
EXPERIMENTALS-----	167
ROTORCRAFT-----	206
LAND PLANES-----	5,242
AGRICULTURAL PLANES-----	121
ARMY SURPLUS-----	48

Figure No. 4

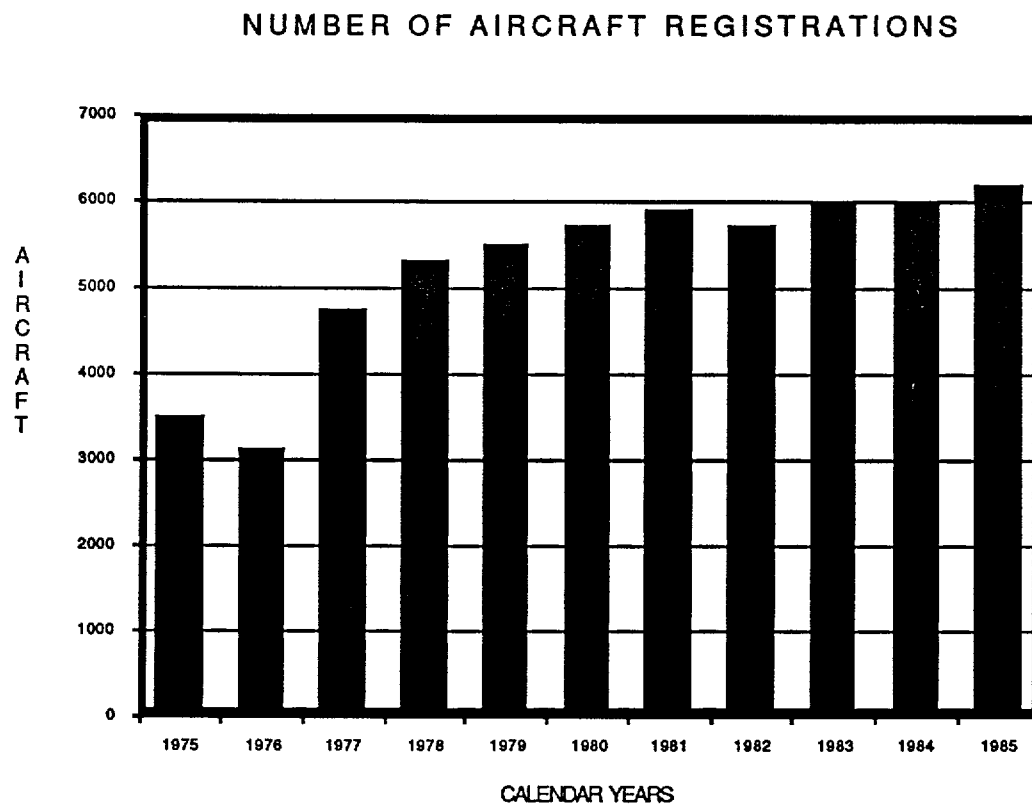


Figure No. 5

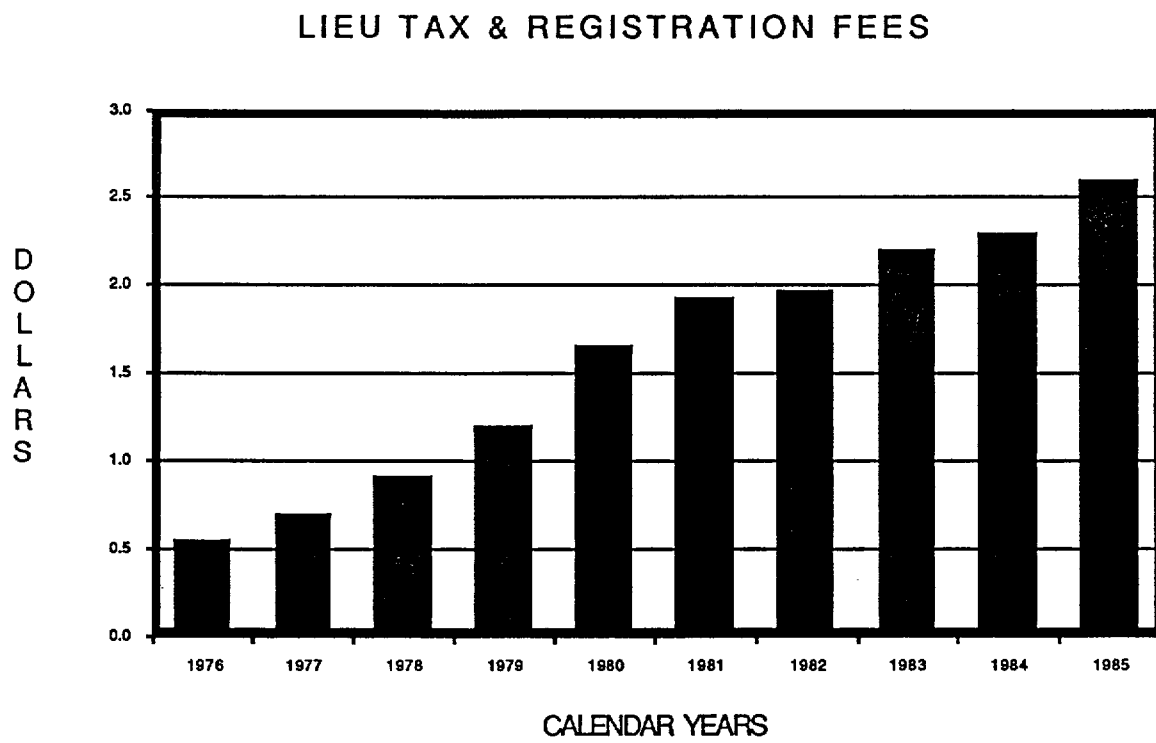


Table 2

HISTORICAL
AIRCRAFT REGISTRATION DATA

<u>FISCAL YEARS</u>	<u>AIRCRAFT REGISTERED</u>	<u>AIRCRAFT LIEU TAX</u>	<u>AIRCRAFT REG. FEES</u>	<u>PENALTY</u>	<u>INTEREST</u>	<u>TOTAL REV. TAX & REG</u>
66-67	1,386	\$	\$ 5,132	\$	\$	\$ 5,132
67-68	1,541		5,037			5,037
68-69	1,795	103,528	8,818			112,346
69-70	2,135	105,058	10,876			160,930
70-71	2,499	160,731	12,248			172,979
71-72	2,945	210,202	15,238			225,440
72-73	3,283	239,821	16,308			256,129
73-74	3,463	424,776	18,641			443,417
74-75	3,487	468,546	19,590			448,136
75-76	4,073	511,330	19,585			530,915
76-77	4,372	699,569	22,213	15,510	2,864	740,156
77-78	5,131	941,568	23,129	9,295	1,668	980,791
78-79	5,289	1,264,776	24,972	10,800	1,409	1,301,957
79-80	5,403	1,608,107	26,156	19,372	5,123	1,658,757
80-81	5,846	1,851,033	27,460	18,662	8,374	1,905,649
81-82	6,009	1,904,154	27,276	19,764	9,210	1,960,405
82-83	6,062	1,949,822	28,210	25,807	15,267	2,019,106
83-84	6,000	2,194,838	29,138	24,268	16,311	2,264,555
84-85	6,159	2,521,643	29,200	21,900	16,892	2,589,635

EXCLUDING DEALERS AND STORED AIRCRAFT - CALENDAR DATA
SOURCES- AERONAUTICS DIVISION ARIZONA DEPARTMENT OF TRANSPORTATION

Table 4

HISTORICAL AVIATION FUEL TAX DATA

<u>FISCAL YEARS</u>	<u>GALLONS OF FUEL</u>	<u>1 CENT/GAL AVIATION FUEL TAX</u>	<u>UNCL/UNREF AV FUEL TAX</u>	<u>TOTAL REVENUE FROM GAS TAXES</u>
66-67	5,766,744	\$	\$106,791	\$106,791
67-68	5,828,129		107,935	107,935
68-69	5,798,436		102,283	102,283
69-70	5,331,384	34,528	105,996	140,524
70-71	5,818,298	59,367	110,462	169,829
71-72	6,144,510	60,307	107,932	168,239
72-73	5,885,395	59,395	126,475	186,870
73-74	6,444,930	64,207	130,815	195,022
74-75	6,871,623	69,781	143,084	212,865
75-76	7,075,481	68,343	174,982	243,325
76-77	9,577,534	72,506	186,152	258,658
77-78	9,541,147	69,926	213,890	283,816
78-79	8,159,000	85,159	254,113	339,272
79-80	9,054,499	90,545	252,089	342,634
80-81	12,453,322	124,533	324,023	448,556
81-82	11,228,545	112,285	268,315	380,600
82-83	8,482,597	84,826	224,728	309,554
83-84	8,227,983	82,279	274,120	356,399
84-85	7,637,721	76,377	382,111	458,488

Table 3

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**AERONAUTICS DIVISION
ADMINISTRATION
REVENUE AND EXPENDITURES**

	<u>1979-1980</u>	<u>1980-1981</u>	<u>1981-1982</u>	<u>1982-1983</u>	<u>1983-1984</u>	<u>1984-1985</u>
BEGINNING FUND BALANCE:	\$3,200,000	\$3,600,000	\$3,300,000	\$4,000,000	\$4,700,000	\$3,500,000
REVENUE:						
Aviation Fuel Tax	\$ 316,000	\$ 441,000	\$ 380,600	\$ 314,639	\$ 356,399	\$ 458,488
Aircraft Lieu Tax	1,614,000	1,858,000	1,898,600	2,009,548	2,194,838	2,518,969
Aircraft Reg. Fee	46,000	48,000	47,200	55,600	29,138	29,137
Misc.&Investments	<u>375,000</u>	<u>479,000</u>	<u>380,000</u>	<u>395,400</u>	<u>427,745</u>	<u>463,846</u>
TOTAL	\$2,351,000	\$2,826,000	\$2,706,400	\$2,775,187	\$3,008,120	\$3,470,439
PERCENT OF INCREASE	26.8%	20.2%	(4.2%)	2.5%	8.4%	15.4%
EXPENDITURES:						
FTE	11	12	14	14	14	15
Personal Services	\$153,500	\$232,400	\$269,200	\$292,500	\$289,308	\$311,860
ERE	29,100	45,800	48,800	55,600	54,968	59,260
Professional & Outside Services	29,100	32,300	25,000	5,000	2,851	7,690
Travel In-State	10,800	12,100	8,800	10,600	14,455	17,160
Travel Out-of-State	7,780	5,200	6,200	8,900	10,455	8,790
OOE	43,470	57,500	43,700	57,000	52,388	64,920
Capital	150	0	0	0	43,522	22,260
Reimbursement to Highway Fund	<u>20,000</u>	<u>64,500</u>	<u>69,000</u>	<u>56,400</u>	<u>36,478</u>	<u>40,300</u>
TOTAL	\$ 293,000	\$ 449,800	\$ 470,700	\$ 486,000	\$ 504,425	\$532,240
PERCENT OF INCREASE	1.5%	53.5%	4.6%	3.2%	3.7%	5.5%
AIRPORT DEVELOPMENT	1,617,000	2,731,000	1,639,000	1,637,000	3,850,921	1,639,530
MISCELLANEOUS	0	16,000	11,000	8,700	0	0
TOTAL EXPENDITURES	1,910,900	3,196,800	2,120,700	2,131,700	4,355,346	2,171,770
NET INCOME (LOSS)	\$ 441,000	\$ (371,000)	\$ 585,700	\$ 643,487	\$(1,347,226)	\$1,298,669
ENDING AVIATION FUND BALANCE:	\$3,600,000	\$3,300,000	\$4,000,000	\$4,700,000	\$3,500,000	\$4,800,000

*Beginning and Ending Aviation Fund Balances are approximate to nearest \$100,000.

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ADMINISTRATION

This section is responsible for the day-to-day operation of the Division. The activities of the Division Director and the Deputy Division Director are included under this section. The Administrative Section is continually involved with a wide spectrum of aviation issues which range from answering inquiries from the public to involvement in national issues of major significance to the aviation community.

The Division is involved and an active member of the National Association of State Aviation Officials (NASAO). As a result, activities such as meetings with the FAA management staff on issues affecting Arizona regarding ~~Flight Service Station (FSS)~~ ^{Aviation} and ~~Tower closures~~; heliport and airport construction funding, Part 77 obstacle criteria and Federal/State relationship on various issues has transpired. Also, the Division through the NASAO organization has attempted to ~~develop~~ ^{strengthen} working relationships with the National Air Transport Association; Airport Operators Council International, Aircraft Owners and Pilots Association and American Association of Airport Executives. The Division Director has also testified before Congress on such matters as the Federal administrative budget for aviation, Essential Air Service program and the regulation of ultralights and various other issues.

The Division participated and made presentations at the fall conference of the Arizona Airports Association meeting. The staff participated in both Maricopa Association of Governments (MAG) and Pima Association of Governments (PAG) Regional Airport and Heliport System Planning meetings. Technical assistance was provided to ~~the~~ ^{Phoenix} Tucson Planning ~~Advisory Committee~~ on a proposed helicopter ordinance, which ~~would have eliminated all helicopter operations in Tucson and has resulted in the preparation of a more acceptable ordinance.~~ Briefings with consultants have been held providing information regarding the Statewide Aviation Needs Study. Coordination of data from the MAG and PAG Regional Aviation System Plan (RASP) studies have been established to ensure proper dovetailing of findings. Since the development of the State Airport System Plan (SASP), the Administrative Section is continually updating the plan in order to forecast activities of airports throughout the system.

An aviation data base and management information system which was started in 1984, upon delivery of the Division's first microcomputer, was expanded and enhanced. The five-year airport development program was automated for the first time, improving staff productivity in the area of statistical calculations. The monthly newsletter was computerized, streamlining the production process and improving the quality. An informational aviation electronic bulletin board was initiated.

Telecommunications capabilities were expanded to include electronic mail and communications with the National Association of State Aviation Officials (NASAO), ~~Aviation Weather systems~~ and the FAA. At the close of the fiscal year, seven airports around the state had ~~micro~~ ^{computer capabilities} and ~~were~~ ^{the state} were working closely with the division in expanding the aviation database.

American Association of Airport Executives (AAAE)

Efforts were also coordinated with the FAA and local airport managers in verifying their data base to be used in the development of the National Plan of Integrated Airport Systems (NPIAS). Work has continued on coordinating the automation of the FAA's 5010 data base and field inspection program with Arizona becoming the first state to receive approval from the FAA to electronically supply 5010 information.

The Administrative Section supplies all support staff for the operational sections, including budget preparation, accounting and fiscal controls, management policy and direction. Also provided are all secretarial and clerical support, records management and personnel services within the Division. This section closely monitors the State Aviation Fund revenues and expenditures. The Aviation Fund receives revenue from a variety of sources including:

- a. State aviation gas taxes which are taxed at ~~\$.13~~^{.16} per gallon, with ~~\$.12~~^{.16} being refundable;
- b. State aircraft lieu tax on non-airline aircraft are concurrently assessed at 1% of the fair market value of the aircraft;
- c. All revenues from the operation of the Grand Canyon National Park Airport; and
- d. Excess funds on deposit are invested by the State Treasurer.

In addition, any Federal grants given to the Division are also listed as revenue, although, technically, can be considered reimbursement for expenses incurred.

The State Aviation Fund expenditures are approved through an annual budget cycle by the State Legislature. The Legislature approves an administrative budget with the remaining available funds appropriated in a lump sum for airport construction and development.

The Transportation Board, through public hearings and a priority rating system, approve individual airport construction projects as published in the Five-Year Airport and Highway Construction Program. (See Airport Development Section for further explanation)

YB

GRAND CANYON NATIONAL PARK AIRPORT

The Aeronautics Division is responsible for the maintenance, operation and improvements of the only active State-owned airport in Arizona. The Airport is located seven miles from the south rim, and was originally constructed with funds from the Department of Interior, the Federal Aviation Administration and the State of Arizona.

Today, it is the third most active air carrier airport in the State following Phoenix Sky Harbor and Tucson International. The airport is presently served by Republic Airlines and over 70 air taxi and commuter carriers. Annual aircraft operations decreased during the year to ~~91,665~~ and the total number of passengers for ~~1984~~ is estimated to be 458,325.

In February 1985 the Department leased the operation, maintenance and development of the airport to private industry. AVCO Services Corporation from Houston, Texas was the successful bidder. In addition to being responsible for the daily operation and maintenance of the airport, AVCO must ~~complete a comprehensive development plan within one year and the construction of a hotel/restaurant complex within four years.~~

~~Changes for commercial activities at the airport were established through~~
~~An administrative rule-making procedure. was promulgated to establish rates and fees for airport users.~~ Financially, in terms of operational expenses, the airport is firmly operating in the black. Revenue figures indicate the airport made \$300,000 during the fiscal year 1984-85.

Figure No. 6

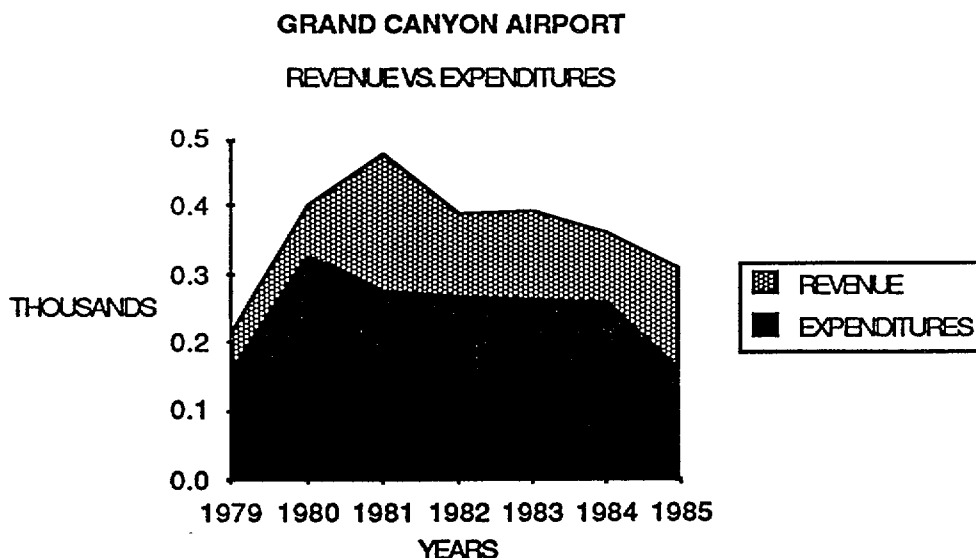


Table 6

**HISTORICAL GRAND CANYON AIRPORT
REVENUE AND EXPENDITURES
AIRCRAFT OPERATIONS AND PASSENGERS ENPLANED**

	<u>1979-1980</u>	<u>1980-1981</u>	<u>1981-1982</u>	<u>1982-1983</u>	<u>1983-1984</u>	<u>1984-1985</u>
Revenue:	\$ 404,000	\$ 476,800	\$ 390,000	\$ 395,300	\$ 362,826	306,955
Percent of Increase (Revenue)	89.7%	18.1%	(18.2%)	1.4%	(8.2%)	(15.4%)
Expenditures:						
FTE	6	9	9	9	9	9
Personal Services	95,840	120,300	120,400	128,170	136,490	87,600
ERE	21,860	28,000	22,800	24,350	25,933	16,640
Profession & Outside Svcs.	15,640	15,600	8,590	2,420	0	0
Travel In-State	500	600	200	360	196	20
Travel Out-of-State	1,635	2,600	1,000	0	0	0
Other Operating Exp.	55,195	106,200	116,320	107,860	96,620	52,900
Capital Equipment	135,350	2,400	0	2,420	738	290
Total Expenditures	\$ 326,020	\$ 275,700	\$ 269,400	\$ 265,580	\$ 259,977	\$ 157,450
Percent of Increase (Expense)	103.2%	15.4%	(2.3%)	(1.4%)	(2.1%)	(39.4%)
Net Income (Loss)	<u>\$ 77,980</u>	<u>\$ 179,800</u>	<u>\$ 120,600</u>	<u>\$ 129,720</u>	<u>\$ 102,849</u>	<u>\$ 149,505</u>
Grand Canyon Airport Annual A/C Operations	96,290	100,354	101,847	93,429	92,665	93,104
Percent of Increase (Decrease)	44.9%	4.2%	1.5%	(8.3%)	(1.9%)	.5%
Estimated Annual Passengers Enplaned	481,450	501,770	509,235	467,145	463,325	465,510
Percent of Increase (Decrease)	44.9%	4.2%	1.5%	(8.3%)	(1.9%)	.5%

Table 5

**COMPARISON OF AIRPORT STAFFING TO PASSENGER AND AIRCRAFT OPERATION VOLUMES
AT PHOENIX, TUCSON AND THE GRAND CANYON AIRPORTS
ON A FISCAL YEAR BASIS**

PHX-SKY HARBOR	<u>FY 81-82</u>	<u>FY 82-83</u>	<u>FY 83-84</u>	<u>FY 84-85</u>	<u>EMPLOYEES</u>	<u>RATIO EMPLOYEES TO CURRENT TOTAL PASSENGER</u>	<u>OPERATIONS</u>
Total Passengers	7,067,662	8,133,075	9,151,728	11,029,518		32,923 to 1	
Total Operations	359,612	349,663	338,100	398,346	335+ police and other support		1,189 to 1
FY - CITY THRU JUNE 30, 1985							
TUCSON	<u>FY 81-82</u>	<u>FY 82-83</u>	<u>FY 83-84</u>	<u>FY 84-85</u>	<u>EMPLOYEES</u>	<u>RATIO EMPLOYEES TO CURRENT TOTAL PASSENGER</u>	<u>OPERATIONS</u>
Total Passengers	1,707,176	1,850,997		2,457,094		15,852 TO 1	
Total Operations	249,645	234,581	304,869	236,082	155+ part time		1,523 to 1
FY-Tucson THRU SEPT. 30, 1982 ADJUSTED - THRU JUNE 30, 1985							
GRAND CANYON AIRPORT	<u>FY 81-82</u>	<u>FY 82-83</u>	<u>FY 83-84</u>	<u>FY 84-85</u>	<u>EMPLOYEES</u>	<u>RATIO EMPLOYEES TO CURRENT TOTAL PASSENGER</u>	<u>OPERATIONS</u>
Total Passengers	549,974	504,247	458,325	521,382		57,931 to 1	
Total Operations	101,847	93,379	91,665	93,104	9		10,345 to 1
FY - STATE THRU JUNE 30, 1985							

RE: TABLE ON THE GRAND CANYON AIRPORT

The estimated number of total passengers at the airport is shown in this table. The number has been estimated from the number of operations on an annual basis. The average type aircraft operating at the airport is a 10 passenger aircraft of the Cessna 414 category. Total passengers are defined as passengers getting on and off of aircraft at the airport. An operation is defined as a take-off or a landing.

AIR SERVICE

The Air Service section is responsible for assisting in the orderly development of the commercial air transportation system serving the state as well as aviation planning functions. This section assists communities and airlines in aviation planning and air service matters which are of regional or statewide significance. It coordinates the development and makes policy recommendations concerning the state's position in relation to air service legislation, administrative rulemaking and legal proceedings before the Department of Transportation (DOT), Federal Aviation Administration (FAA), or Congress. The Air Service section works with other state agencies to ensure common directions are taken in the improvement of aviation.

Since 1978, there have been dramatic changes brought about as a result of the Airline Deregulation Act. Prior to its enactment, the Division was active in both domestic and international route awards, along with the federal certification proceedings of Cochise and Skywest Airlines, a legal process which took more than three years.

Since that time, the section has primarily been concerned with the small communities Essential Air Service (EAS) provision of the Airline Deregulation Act. Eight Arizona communities were assisted in the evaluation of EAS determinations from the CAB. They include Flagstaff, Grand Canyon, Kingman, Page, Prescott, Winslow, Yuma and Douglas. Three cases Kingman, Prescott and Douglas required an extensive amount of time and effort by the Division, which have resulted in air service improvements for Kingman and Prescott and a determination denial for Douglas. Prescott air service has increased from two flights per day to Phoenix in 1980, to 10 flights per day in 1984. Additionally, the past year saw EAS carrier selection cases at Kingman, Page, Prescott and Winslow. All cases were monitored by this section.

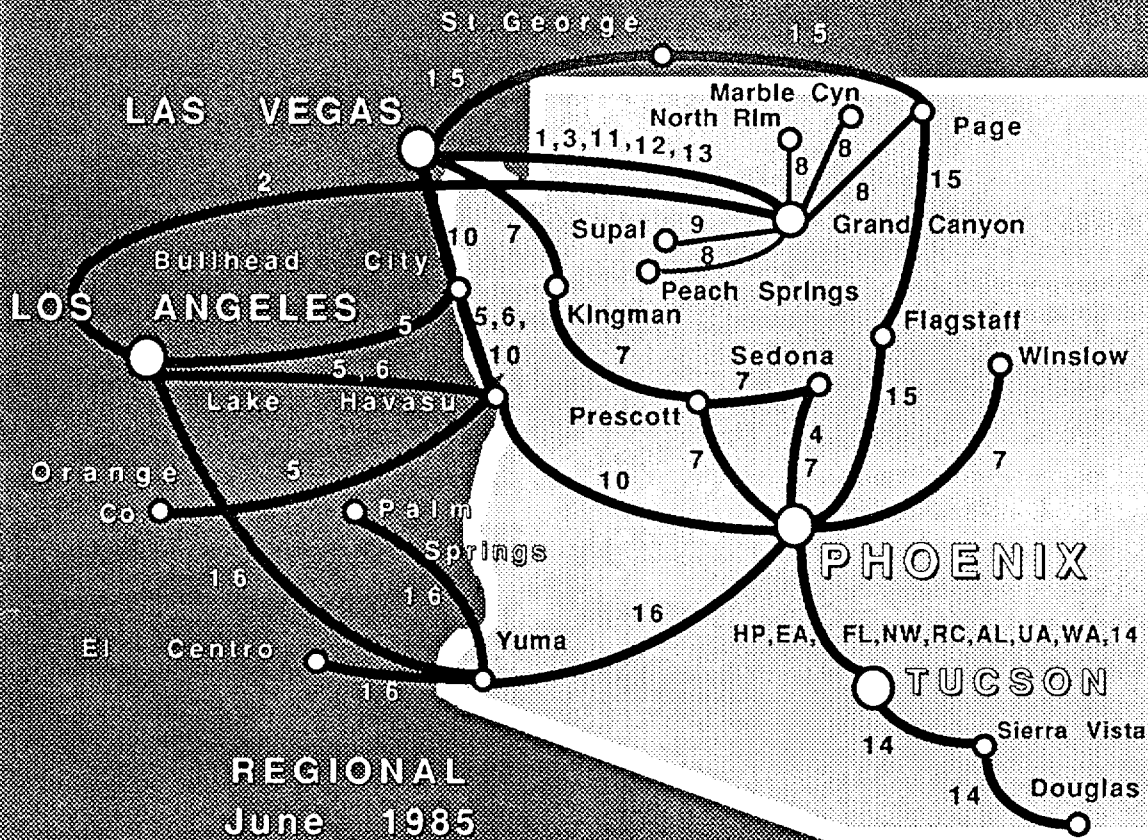
The section also monitors air passenger traffic in the state to verify FAA's findings and coordinate errors with local airport sponsors. Such statistics are used by FAA to determine airport improvement funds. Since 1980, this effort has netted approximately \$500,000 in entitlement funds alone for the State owned Grand Canyon National Park Airport. Assistance was also provided for the City of Prescott.

Planning responsibilities were transferred to the Division in the Spring of 1984. The Aviation Needs Study, a legislative mandate on the performance of the State's transportation system, was coordinated and completed by the Division. Contracts were also administered for an aviation economic impact study and airport/heliport land use compatibility study. All three studies are a part of the State Aviation System Plan which will be fully automated for easy update. System planning efforts were also coordinated with both Regional Airport System Plans that were being developed for the Maricopa and Pima County areas.

This section also developed a pictorial/text aviation data base, which can list and compare both national and local facts, figures and geographic locations. Completed at no cost to the state on off duty hours, it has received international recognition. The map on the following page depicts the current routes flown by both major and commuter airlines within the boundaries of Arizona as of June 1985.

Arizona Department of Transportation

SCHEDULED AIR SERVICE ROUTES



REGIONAL
June 1985

COMMUTER AIRLINES

PHONE

1. AIR CORTEZ	800-221-1197
2. AIR LA	213-843-1984
3. AIR NEVADA	800-634-6377
4. AIR SEDONA	800-535-4448
5. ALPHA AIR	800-824-2610
6. DESERT AIRLINES	714-929-8500
7. GOLDEN PACIFIC AIRLINES	800-352-3281
8. GRAND CANYON AIRLINES	800-528-2469
9. GRAND CANYON HELICOPTERS	602-638-2658
10. HAVASU AIRLINES	800-824-6614
11. LAS VEGAS AIRLINES	800-634-6851
12. MID PACIFIC AIRLINES	800-367-7010
13. SCENIC AIRLINES	800-634-6801
14. SIERRA VISTA AVIATION	602-458-2855
15. SKYWEST AIRLINES	800-453-9417
16. SUN AIRE LINES	800-854-4347

Note: Major airlines between Phoenix & Tucson are America West (HP), Eastern (EA), Frontier (FL), Northwest Orient (NW), Republic (RC), U.S. Air (AL), United (UA), Western (WA).

AVIATION SAFETY AND EDUCATION

The Aviation Safety and Education Section is responsible for the dissemination of aviation information, air safety, aerospace education, and monitoring aviation regulations. Duties include planning, organizing and conducting aviation safety seminars. The Section is also a member of the Aviation Safety Advisory Group. This group, whose members represent various aviation users, provides input to the FAA Accident Prevention Program, and conducts a yearly Flight Instructor/A & P Mechanic of the Year awards banquet.

Efforts during 1984-85 concentrated on assisting with the aviation section of the Arizona Transportation Needs Study, continuing the safety seminar program, completing the FAA 5010 Airport Master Record inspection program for FY85 and computerizing the airport drawings, promoting helicopters and the establishment of public-use heliports, assisting with the State Aviation System Plan, automating the typesetting/layout of the newsletter, reviewing several private sector weather data reporting and retrieval systems, becoming familiar with electronic communications, and membership on the Arizona Aviation Week organizing committee.

The Aviation Safety and Education Section edits and arranges for the publication of the newsletter, Aviation, as well as arranging for the printing of the Aeronautical Chart and other aviation related information.

Aeronautical chart publication was reinstituted in 1979. The chart is a valuable tool and continues to be very popular with the aviation community. This year's chart features large scale area charts for the Phoenix, Tucson and Grand Canyon areas; military approach and departure paths; frequently used Grand Canyon tour routes and recommended operating procedures; Apache Attack Helicopter flight test area; glider, parachute jumping and ultralight areas; and general aviation VFR Flyways.

A library of video tapes has been started and is being expanded. The State and Regional Defense Airlift Program is maintained and updated by this Section.

As a member of the ASU Aeronautical Technology Industrial Advisory Committee, the Section participated in a curriculum review process of the Aeronautical Technology program at Arizona State University. Two new areas of study, which follow prescribed FAA courses for hiring, are now available. The two programs, Airway Science Management and Aircraft Systems Management, prepare students for careers as aviation managers and professional pilots, respectively.

During 1984-85, continued emphasis was placed on coordinating the Arizona Airspace Utilization Committee, the informal Airspace Users Committee, and participation on the Heliport Committees for the Arizona Chapter of the American Helicopter Society and the National Association of State Aviation Officials.

The division has continued to sponsor quarterly aviation safety seminars in Phoenix, Tucson and Prescott. Also, the expanded seminar program continued during '84-'85. Additional seminars are held during the months between the traditional quarterly seminars. These seminars are designed to attract pilots that may not have attended the traditional meetings in the past. Locations and times have been varied. During August, Hughes Helicopters was the location for a seminar highlighting the Hughes flight test area. Over 1000 persons were attracted to the seminar and plant tour. More diverse subjects are being covered, such as cosponsored seminars with the Arizona Hot Air Balloon Club dealing with balloon safety.

PUBLICATIONS

Aviation

Aviation is the official publication of the Arizona Department of Transportation, Aeronautics Division and is distributed periodically to Arizona aircraft owners, aviation organizations, in-state news media, federal and state agencies, aviation publications and airline representatives. There were four issues during FY '84-'85.

The purpose of this publication is to disseminate information on safety, airport development projects, news and activities from local aviation organizations as well as national news affecting aviation.

Aviation has recently been converted to electronic typesetting/layout utilizing the micro-computers, allowing for a significant reduction in the time required in preparation for printing.

Arizona Aeronautical Chart

The Arizona Aeronautical Chart is published annually and distributed through commercial flight operators and airport sponsors. The chart is for aerial navigation and flight planning and provides complete coverage of Arizona, with detailed area charts of Phoenix, Tucson and, with the 1985 edition, the Grand Canyon. The area charts highlight VFR Flyways, military and tour operator routes, and other high density traffic areas.

Progress Report

The annual progress report is a composite of the activities of the Aeronautics Division over the preceding fiscal year.

Helicopter Facts

A booklet on the basic questions a person may ask concerning a helicopter and how it flies. It is designed as a public education tool during helicopter displays or upon request from an individual.

State Aviation System Plan

A modular series of documents which incorporates sections dealing with a statewide analysis of the economic impact of aviation, a facility needs analysis of the State's primary airport system, an aircraft activity counter program, a land use compatibility guide, a commuter air service feasibility study, and a section on new technology for airport management services.

Status and Performance Report for Arizona's Transportation System

A multimodal analysis (aviation, highways, and transit) of Arizona's projected transportation needs for the next twenty years. It constitutes an identification of the additional financial requirements, above and beyond expected revenues, necessary to operate, maintain, and/or improve transportation systems to specified levels of performance.

Figure No. 7

